

Description of a Fossil Cranium of the Musk-buffalo (Bubalus moschatus, Owen), from the Gravel at Maidenhead, Berks. By Prof. OWEN, F.G.S.

This specimen was discovered by the Rev. Mr. Kingsley and Mr. J. Lubbock in a gravel-pit close to the engine-house at the Maidenhead station last summer, and is the first example of the subgenus *Bubalus* yet recognized as fossil in Britain. It consists of the cranial part of the skull, with the horn-cores, nearly perfect. The Professor, in describing this fossil, first offered his reasons for regarding the so-called "Musk-ox" as having been unnecessarily separated from the Buffaloes, and then gave an account of the few fossil skulls of the Musk-buffalo yet known, viz. those figured by Pallas, Ozeretskowsky, and Cuvier. A comparison was then made of the fossil remains with recent crania; and, although the skulls somewhat differ in a few points, especially in the relative curvatures of the horn-cores, yet the author was led to conclude that, as far as the materials for comparison at his command would serve, the differences between the fossil and recent Musk-buffaloes are not of specific value; that the *Bubalus moschatus* of the Arctic regions, with its now restricted range, is the slightly modified descendant of the old companion of the Mammoth and the Tichorhine Rhinoceros, which with them enjoyed a much wider range, both in latitude and longitude, over lands that now form three divisions or continents of the northern hemisphere; and that the circumstances which have brought about the probably gradual extinction of the northern Rhinoceros and Elephant have not yet effected that of the contemporary species of Arctic Buffalo.—*Proc. Geol. Soc.* Dec. 19, 1855.

A last word on Scissurella. By J. GWYN JEFFREYS, Esq., F.R.S.

To the Editors of the Annals of Natural History.

GENTLEMEN,—I had not intended at first to notice the communication of Mr. Woodward in your last Number, entitled "On the Evils of Increasing Synonyms;" but, lest it may be assumed that I admit his statements, I must request you to insert these few remarks.

The real question at issue, and the only one which in any way concerns naturalists or the cause of science, is whether *Schismope* is synonymous with *Scissurella*, or whether they constitute distinct genera. Now, although Mr. Woodward modestly states that he has shown they are synonymous and that the fact admitted of no reply, I cannot help reminding your readers that Dr. Gray (who is undeniably a much better authority than either Mr. Woodward or myself) has expressed a contrary opinion, and that the respective characters of those genera were taken from species which differ from each other in form, organization, and habit. I have now before me 130 specimens of *Scissurella crispata* of different ages and sizes, all of which exhibit the open slit.

As regards myself personally, I must repeat my regret that Mr.

Woodward has thought proper to mistake and pervert what passed between us, as it has nothing whatever to do with the present controversy.

It is true that he asked me for specimens of the *Schismope*, and that I referred him to Mr. Damon, who had all my collection of Mediterranean shells, on his repaying me (by previous agreement) the expenses I was at in dredging. But it is *not* true, that when I took him specimens (which I had a day or two before picked out of some sand), he put such an impertinent question to me as he suggests my remembering.

It was on this occasion that we examined together under a microscope *these* specimens (and not the specimens given to him by Mr. Damon), and that he noticed the peculiar structure of the closed slit. After we had consulted Philippi, and Sowerby's 'Genera' (and *not* "at that time," as Mr. Woodward would have me say), I went to the British Museum Library and referred to Sowerby's translation in the Zoological Journal of D'Orbigny's Memoir. The result of this reference I gave in a former paper.

When I took Mr. Woodward the specimens, I certainly understood him to say that he was unacquainted with any other species of *Scissurella* than *S. crispata*. It was some time afterwards that he showed me Mr. M'Andrew's specimen of *S. angulata*, Lovén (a true *Scissurella* and closely allied to *S. crispata*, but of a much larger size); and I certainly never saw D'Orbigny's specimen of *S. Bertheloti* in company with Mr. Woodward, nor heard him say anything about a New Zealand *Scissurella*. We examined together a collection of fossil shells (containing *Pleurotomaria* and *Trochotoma*) in quite another part of the Museum; and this he seems to have mistaken for the D'Orbignyan collection.

This explanation, however, cannot interest your readers; and I will not trespass any more on their patience.

I am, Gentlemen, yours obediently,

J. GWYN JEFFREYS.

1 Montagu Square, 11th July 1856.

New Mode of Cleaning Diatomaceous Deposits.

By Prof. J. W. BAILEY.

Having found the following method of cleaning diatomaceous deposits more speedy and efficacious than any other I have tried, I recommend it to all those who may have occasion to prepare specimens of the *siliceous* organisms in soundings, guano, mud, &c. Dissolve out the lime compounds, if present, by means of nitric or hydrochloric acid, wash and filter. Then put the moist contents of the filter into a porcelain capsule with enough strong *sulphuric acid* to make of the whole a fluid mass. Heat the capsule over a spirit-lamp until the organic matters are all charred, and continue the heat until strong acid fumes are evolved. Keep the capsule hot, and add, in minute portions at a time, finely powdered *chlorate of potassa*. If the acid is hot enough to give off fumes, the chlorate will be immediately decomposed without the accumulation of explosive gases,